# **Astronomical twilight switches**

### MEMO AST1 / AST2

#### DIMENSIONS (mm)

#### **CONNECTION DIAGRAM**

Time switches to manage electric utilities over time between sunset and sunrise time calculated according to the set geographical area.

Particularly suitable to light shops, luminous signs, fountains, etc.

The NFC interface allows the coupling with smartphones and tablets to transfer the programs made on the smartphone thanks to the dedicated app.

The rear cover of the instrument allows the replacement of the depleted battery.



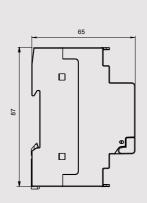
- Wide backlit display to visualize date, time and relay status
- Container: 2 DIN modules
- Text guide
- Sealable cover
- Cover on the back for battery replacement



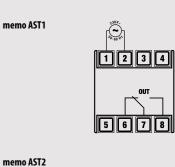




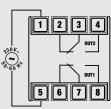
## Side view



#### Diagram







# .... ....

#### **DIGITAL TWILIGHT SWITCHES** WITH NFC INTERFACE

- Power supply: 230 V AC 50/60 Hz
- Versions:
- Memo AST1 with 1 programmable relay output (see programs)
   Memo AST2 with 2 programmable relay outputs (see programs)
- Manual override of the relay (temporary or permanent)
- Automatic summer time update
  Correction of the calculated sunrise and sunset time: ± 120 minutes
- Battery life: 5 years (replaceable)
- Depleted battery signal NFC type 5 interface
- Keypad lock by password
- Menu in five languages: Italian, English, Spanish, German, French

#### What you can do with the app

- Create programs directly on the smartphone Transfer programs created on multiple memo clocks
- Acquire programs from a memo and copy them to other memo (copy / paste)
- Switch relay outputs manually
- Acquire settings (date, time, coordinates) automatically and transfer them to the memo





Code	Model	Description	n. relays
VE344800	memo AST1	Astronomical twilight switch with NFC interface	1
VE343000	memo AST2	Astronomical twilight switch with NFC interface	2

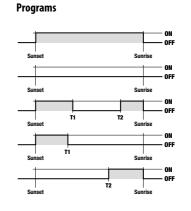
# MEMO AST1/AST2-ENG-201903

# **TIME AND MANAGEMENT**

#### **TECHNICAL INFORMATION**

#### **GENERAL CHARACTERISTICS**

Power supply	V AC	230 (-10% ÷ +10%) 50/60 Hz
Absorption	VA (W)	8 (2)
Output	- Memo AST1	1 relay in monostable change-over
	- Memo AST2	2 relays in monostable change-over
Capacity at 250 V AC	А	16 (10)
Incandescent lamps	W	2000
Fluorescent lamps (compensated)	VA	250
Low voltage halogen lamps	VA	1000
Halogen lamps (at 240V)	W	2000
Low consumption lamps (CFL)	VA	200
Low consumption lamps (Downlight	s) VA	200
LED	VA	25
Battery life		5 years (Lithium battery CR-2032)
Charge reserve (for battery replacement)		1 minute
Switchings in case of power failure		No
Programming resolution		1 minute
Operating precision		± 0.5 seconds/day at 25 ° C
Operating temperature	$^{\circ}$	-20 ÷ +50°C
Storage temperature	$^{\circ}$	-10 ÷ +70
Degree of protection		IP20 / IP41 (on the front)



T1 and T2 can be:
1. a precise hour
2. a delay respect to
the sunset (T1) or
an advance respect
to the sunrise (T2)
3. a pulse of 59 seconds

#### **REFERENCE STANDARDS**

Compliance with Community Directives: 2014/35/EU (LVD) • 2014/30/EU (EMCD) is declared with reference to the following

EN 60730-2-7 • EN 55014-2 • EN 55014-1

